

REMARKS/ARGUMENTS

Claims 1-26 and new claims 27-28 are pending in the application.

Reconsideration and a withdrawal of the rejection is respectfully requested in view of the above amendment and the following remarks.

New claims 26-27 have been included to more particularly distinguish the invention and to round out the scope of coverage for the invention by reciting that the protective carrier is localized at the tank. No new matter has been introduced, and these amendments are fully supported by the disclosure, see, e.g., the original specification, p. 6 line 30 to p. 7 line 10.

1. The Objection to the Specification

The Examiner has objected to the disclosure as lacking section headings. Applicant has amended the specification and submits herewith a substitute specification to address this objection. A red-lined copy of the original specification showing the relative changes by strikethrough and underlining also is enclosed herewith. For these reasons, the objection to the disclosure is believed to be obviated and reconsideration and a withdrawal of the rejection is respectfully requested.

2. The 102(b) Rejections of Claims 1-4 Over US 4,680,100 and US 6,190,530 Should be Withdrawn

Claims 1-4 stand rejected as being unpatentable over US 4,680,100 ("Morin") and also as being unpatentable over US 6,190,530 ("Brodsky et al."). These rejections are respectfully but strenuously traversed, and reconsideration and a withdrawal of the rejections are hereby respectfully requested.

Turning to the rejection of the claims over Morin, the Examiner contends that Morin teaches a device for treating a planar work piece 32 with a fluid, i. comprising at least one protective carrier 36 (referring to Fig. 7 of Morin) for holding the work pieces. The Examiner further contends that the carrier 36 is received for treatment by a fluid containing tank 52 (citing to Fig. 10 of Morin) and ii. at least one means that permits the

fluid to flow into the protective carrier in a manner that the Examiner considers will not substantially deform and/or shift position after the work pieces are received in the protective carrier 36.

Applicant's invention is distinguishable over Morin, and should be patentable. Applicant has amended the independent claims 1 and 14 to more particularly distinguish the Applicant's present invention. No new matter has been introduced, and the claims are fully supported by the specification. Claim 1 now recites that the device includes a transport system adapted to convey the work pieces to the tank (see the original specification at p. 4, lines 4-5), and a transport system which is adapted to introduce the work pieces into the protective carrier (see specification at p. 4 lines 5-8). Claim 1 further provides for an aperture in the protective carrier which permits fluid to flow into the protective carrier in a manner that the workpieces will not substantially deform or shift position (see specification at p. 4, lines 9-11 and lines 16-17). The amended language of claim 1 includes a processing tank (specification at p. 3, lines 23, 26-27 and p. 4, lines 6-9), and also recites the features as follows:

- iii. a transport system being adapted to convey the work pieces to the tank
- iv. a transport system being adapted to introduce the work pieces into the protective carrier;
- v. means for transferring the protective carrier together with the work pieces into the tank; and
- vi. at least one means aperture in the protective carrier that permits the fluid to flow into the protective carrier [(5)] in such a manner that the work pieces [(1)] within the protective carrier will not substantially deform and/or shift position [[,] after the work pieces (1) have been received in the protective carrier (5).

Claim 1 is now believed to more particularly distinguish the invention over Morin.

Applicant's present invention serves to treat flexible work pieces in a processing fluid which is contained in a tank. If, according to prior art, a flexible work piece were immersed into a processing fluid contained in a tank, the work pieces would

uncontrollably warp, be corrugated or deflected in any other way such that controlled immersion into the fluid would not be possible.

An object of the Applicant's invention is to immerse work pieces handled by the invention into a processing fluid without experiencing such warpage, corrugation or deflection such that controlled immersion will be made possible. In accordance with the features recited and claimed above, Applicant's invention facilitates controlled immersion so as to avoid the aforementioned problems. A further object of the Applicant's claimed invention is to effect such controlled immersion in an automated plant which is designed to process the flexible work pieces and to assure that the work pieces are not damaged due to the handling thereof, as these work pieces are very sensitive.

The problems discussed above are solved by the present invention, including providing a protective carrier, conveying the work pieces to the tank, introducing the work pieces into the protective carrier and transferring the protective carrier together with the work pieces into the tank. For such purpose transport systems and at least one aperture in the protective carrier are provided.

Neither Morin (nor Brodsky et al.) address the above problems. Though both, Morin and Brodsky et al. disclose processing "work pieces", such "work pieces" are in fact counter electrodes which are used in a process for treatment of any (real) work piece. Thus, these "work pieces" of the type attributed by the Examiner in the cited references are not intended to be disposed into the tank where they would have to be treated and, after treatment, removed from the tank. Instead, these counter electrodes are permanently positioned in the tank. This is distinguishable from the actual "work pieces", which, however, are placed into the tank and are thereafter removed from it again (such as the work piece 25 shown in Fig. 1A in the Brodsky et al. reference). Therefore, the problem addressed in the present application is not at all relevant to both, Morin and Brodsky et al., since their electrodes remain in the tank, once they are installed there. For this reason, those of ordinary skill in the art would not be motivated to provide any transport system for the "work pieces" disclosed in Morin or Brodsky et al. Furthermore, those skilled in the art would not have been motivated to use a protective carrier for the work pieces (and not for the counter electrodes that the Examiner). Therefore, the present

invention is not obvious over any of the cited references.

In addition to the references failing to disclose the Applicant's invention for the above reasons, the claims also contain features which are not disclosed or suggested by the cited art. The Examiner considers the electrode in Morin, which is made from an elongated tow 32, to be a work piece. However, even considering Morin, features claimed by the Applicant's invention are not disclosed or suggested. Even if the Morin electrode which is made of the elongated tow 32 would be considered a work piece, Morin does not disclose a transport system being adapted to introduce such work piece into the protective carrier (inert screen 36) nor does Morin disclose a transport system being adapted to introduce such work piece into the inert screen, nor does it disclose means for transferring the inert screen together with such work piece into the tank.

Accordingly, for these reasons, the Applicant's present invention, as recited in amended claim 1, is distinguishable over Morin.

Turning to the rejection of claims 1-4 over Brodsky et al, likewise, Brodsky et al. also is deficient of a disclosure or suggestion of the Applicant's invention. The Examiner contends that Brodsky et al. teaches a device i. comprising at least one protective carrier container 20 (referring to Fig. 1 of Brodsky) for holding the work piece 19. The Examiner further contends that the carrier 20 is adapted to be received for treatment by a fluid containing tank 12 (citing to Fig. 1) and ii. at least one means that permits the fluid to flow into the protective carrier in a manner that the Examiner considers will not substantially deform and/or shift position after the work pieces are received in the container 20. In other words, the Examiner considers the metal anode material in the form of spheres 19 in the Brodsky et al. reference to be a work piece.

As discussed above in connection with Applicant's position supporting the patentability of the invention over Morin, Applicant's invention is also distinguishable over Brodsky et al. for the same reasons. Applicant's amendments to the claims further define features of the invention over Brodsky et al.

Even considering the Examiner's position set forth in the office action, the Applicant's invention is distinguishable over Brodsky et al. Even assuming, as the Examiner does, that the metal anode material in the form of spheres 19 would be

considered a work piece, Brodsky et al. still does not disclose a transport system being adapted to introduce the Brodsky work piece (e.g., the spheres 19) into the protective carrier (container 20). In addition, Brodsky et al. also fails to disclose or suggest a transport system being adapted to introduce such work piece into the protective carrier, nor does it disclose means for transferring the protective carrier together with such work piece into the tank. Therefore, the subject-matter of claim 1 is not anticipated by, nor is it taught, suggested or disclosed by Brodsky et al. (or Morin as discussed above).

3. The 102(b) 103 Rejection of claims 14, 15, 22 and 24 Over Morin Should be Withdrawn

Claims 14, 15, 22 and 24 stand rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. 103 as being obvious over Morin. This rejection is respectfully but strenuously traversed, and reconsideration and a withdrawal of the rejection is hereby respectfully requested.

First, for the reasons set forth above distinguishing the Applicant's present invention of claims 1-4 over Morin, claim 14 should also be patentable over Morin. Claim 14 has been amended to more particularly distinguish the Applicant's invention. No new matter has been introduced, and this claim is fully supported by the disclosure. Claim 14, as amended, recites providing a protective carrier at the tank, the protective carrier comprising at least one aperture. This feature is supported by the specification at p. 8, lines 13-15, and p. 4, lines 16-17. Claim 14 also more particularly distinguishes the Applicant's present invention by reciting conveying the work pieces to the tank (see the specification at p.4, lines 4-5), introducing the work pieces into the protective carrier (see the specification at p. 4, lines 6-8), as well as the step of transferring the protective carrier (carrying the work pieces) to the tank (see the specification at p. 3, lines 28-29 and p.4 lines 8-9). These features are particularly recited in claim 14, which now includes:

- ii. conveying the work pieces to the tank;
- iii. receiving introducing the work pieces [(1)] in into a the protective carrier [(5)];
- iv. conveying transferring the protective carrier [(3)] together with the work pieces into the tank [(3)] or disposing the protective carrier (3) in the tank (5); then

~~filling the protective carrier (5) with the fluid in such a manner that the work pieces (1) will not substantially deform and/or shift position; and next~~
v. treating the work pieces [(1)] with the processing fluid.

These steps further distinguish claim 14 over the cited art.

As set forth above distinguishing the invention over Morin with respect to claims 1-4, given that the electrode which is made from the elongated tow 32 would be considered by the Examiner to be the "work pieces", Morin would still fail to teach, suggest or disclose, Morin does not disclose conveying such work piece to the tank.

For the above reasons, Applicant respectfully requests reconsideration and a withdrawal of the rejection of claim 14. Claims 15, 22 and 24, which depend from claim 14 (directly or ultimately) for the same reasons, also should be patentable over the cited art.

4. The 103(a) Rejection of Claim 5 Over Morin In View of Forand Should be Withdrawn

Claim 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Morin in view of US 5,938,899 ("Forand"). This rejection is respectfully but strenuously traversed, and reconsideration and a withdrawal of the rejection is hereby respectfully requested.

For the reasons set forth above distinguishing the Applicant's present invention over the cited art, including the Morin reference, claim 5 also should be patentable. Reconsideration is requested.

5. The 103(a) Rejection of Claim 6 Over Morin In View of Forand and Ewell Should be Withdrawn

Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Morin in view of Forand and further in view of US 1,374,370 ("Ewell"). This rejection is respectfully but strenuously traversed, and reconsideration and a withdrawal of the rejection is hereby respectfully requested.

For the reasons set forth above distinguishing the Applicant's present invention

over the cited art, including the Morin reference, claim 6 also should be patentable.
Reconsideration is requested.

6. The 103(a) Rejection of Claims 7 and 23 Over Morin In View of Uzoh
Should be Withdrawn

Claims 7 and 23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Morin in view of US publication 2001/0050233 ("Uzoh"). This rejection is respectfully but strenuously traversed, and reconsideration and a withdrawal of the rejection is hereby respectfully requested.

For the reasons set forth above distinguishing the Applicant's present invention over the cited art, including the Morin reference, claims 7 and 23 also should be patentable. Reconsideration is requested.

7. The 103(a) Rejection of Claims 8 and 26 Over Morin In View of Marek
Should be Withdrawn

Claims 8 and 26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Morin in view of US 2,365,202 ("Marek"). This rejection is respectfully but strenuously traversed, and reconsideration and a withdrawal of the rejection is hereby respectfully requested.

For the reasons set forth above distinguishing the Applicant's present invention over the cited art, including the Morin reference, claims 8 and 26 also should be patentable. Reconsideration is requested.

8. The 103(a) Rejection of Claims 9, 10, 16-18 and 21 Over Morin In View of
Le Bras Should be Withdrawn

Claims 9, 10, 16-18 and 21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Morin in view of US 3,784,460 ("Le Bras"). This rejection is respectfully but strenuously traversed, and reconsideration and a withdrawal of the rejection is hereby respectfully requested.

For the reasons set forth above distinguishing the Applicant's present invention over the cited art, including the Morin reference, claims 9, 10, 16-18 and 21 also should

be patentable. Reconsideration is requested.

9. The 103(a) Rejection of Claims 11, 12, 19 and 20 Over Morin In View of Le Bras And In Further View of Friedman Should be Withdrawn

Claims 11, 12, 19 and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Morin in view of Le Bras in further view of US 2,461,113 ("Friedman"). This rejection is respectfully but strenuously traversed, and reconsideration and a withdrawal of the rejection is hereby respectfully requested.

For the reasons set forth above distinguishing the Applicant's present invention over the cited art, including the Morin reference, claims 11, 12, 19 and 20 also should be patentable. Reconsideration is requested.

10. The 103(a) Rejection of Claim 13 Over Morin In View of Le Bras, Friedman And Marek Should be Withdrawn

Claim 13 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Morin in view of Le Bras, Friedman, and in further view of Marek. This rejection is respectfully but strenuously traversed, and reconsideration and a withdrawal of the rejection is hereby respectfully requested.

For the reasons set forth above distinguishing the Applicant's present invention over the cited art, including the Morin reference, claim 13 also should be patentable. Reconsideration is requested.

11. The 103(a) Rejection of Claim 25 Over Morin In View of Ewell Should be Withdrawn

Claim 25 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Morin in view Ewell. It is noted that the Examiner also mentions Forand in connection with the rejection of claim 25. This rejection is respectfully but strenuously traversed, and reconsideration and a withdrawal of the rejection is hereby respectfully requested.

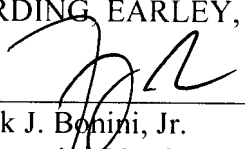
For the reasons set forth above distinguishing the Applicant's present invention over the cited art, including the Morin reference, claim 25 also should be patentable. Reconsideration is requested.

CONCLUSION

The Applicant's present invention provides a novel device and method for treating flat and flexible work pieces which provides advantages over the prior art and facilitates improved handling of the work pieces by tending to avoid warping of the work pieces as they are conveyed and processed in a fluid. Applicant's device and method are not disclosed or suggested by the cited references, either alone, or when combined. Accordingly, Applicant's invention should be patentable.

The Commissioner is authorized to charge any additional fees which may be required to Patent Office Deposit Account No. 05-0208.

Respectfully submitted,
HARDING, EARLEY, FOLLMER & FRAILEY



Frank J. Bonini, Jr.
Registration No. 35,452
86 The Commons at Valley Forge East
1288 Valley Forge Road
P.O. Box 750
Valley Forge, PA 19482-0750
Telephone: 610-935-2300
Attorney for Applicant

Date: 8/10/07